New Source Review Proposed Amendments 2000FEB draft

Table of Contents

| TABLE OF CONTENTS | 1 |
|---|-------------|
| WAC CHAPTER 173-400: GENERAL REGULATIONS FOR AIR POLLUT | ION SOURCES |
| | 2 |
| WAC 173-400-030 Definitions | 2 |
| WAC CHAPTER 173-465: NEW SOURCE REVIEW FOR AMBIENT AND POLLUTANTS | |
| <i>WAC 173-465-010 Purpose and Policy.</i> | 9 |
| WAC 173-465-020 Definitions | 9 |
| WAC 173-465-030 New Source Review Fees. | 10 |
| WAC 173-465-040 BACT (Best available control technology) | 13 |
| WAC 173-465-110 Applicability | 13 |
| WAC 173-465-120 Notice of Construction Application. | |
| WAC 173-465-130: Requirements in nonattainment areas | 20 |
| WAC 173-465-140: Requirements for new sources and modifications in attain | nment or |
| unclassifiable areas | 22 |
| WAC 173-465-210 Standards of Performance for New Sources (NSPS) | 23 |
| WAC 173-465-220 Prevention of significant deterioration (PSD) | 24 |
| WAC 173-465-310 Requirement to quantify TAP emissions | 24 |
| WAC 173-465-320 gBACT | 26 |
| WAC 173-465-330 Ambient impact requirement | 27 |
| WAC 173-465-340 Demonstrating ambient impact compliance | 28 |
| WAC 173-465-350 Request for Site-Specific Analysis. | 28 |
| WAC 173-465-360 Request For Risk Management Decision | 30 |
| WAC 173-465-370 Acceptable Source Impact Levels | 31 |
| WAC 173-465-380 Toxic air pollutants; ASILs, de minimis, & SQERs | 32 |

This is a combination of all NSR from chapters 400 and 460 into a unified ambient/toxic NSR.

Send informal comments to Steve Cross, 360-407-6875 (STCR461@ecy.wa.gov).

WAC Chapter 173-400: General Regulations for Air Pollution Sources

WAC 173-400-030 Definitions

| Except as provided elsewhere in this chapter, the following definitions apply throughout the chapter: |
|---|
| (1) "Actual emissions" means |
| (2) "Adverse impact on visibility" means |
| (3) "Air contaminant" means dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substance, or any combination thereof. "Air pollutant" means the same as "air contaminant." |
| (4) "Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants in sufficient quantities, and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property. For the purposes of this chapter, air pollution shall not include air contaminants emitted in compliance with chapter 17.21 RCW, the Washington Pesticide Application Act. |
| (5) "Allowable emissions" means |
| (6) "Ambient air" means |
| (7) "Ambient air quality standard" means |
| (8) "Authority" means any air pollution control agency whose jurisdictional boundaries are coextensive with the boundaries of one or more counties. |
| (11) "Best available retrofit technology (BART)" means |
| (12) "Bubble" means |
| (13) "Capacity factor" means |
| (14) "Class I area" means |
| (15) "Combustion and incineration sources" means |

- (16) "Commenced construction" means that the owner or operator has all the necessary preconstruction approvals or permits and either has:
 - (a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
 - (b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

| (17) "Concealment" means |
|--|
| (18) "Director" means |
| (19) "Dispersion technique" means a method which attempts to affect the concentration of a pollutant in the ambient air other than by the use of pollution abatement equipment or integral process pollution controls. |
| (20) "Ecology" means the Washington state department of ecology. |
| (21) "Emission" means a release of air contaminants into the ambient air. |
| (22) "Emission reduction credit (ERC)" means |
| (23) "Emission standard" and "emission limitation" means |
| (24) "Emissions unit" means |
| () "EPA" means the United States Environmental Protection Agency. |
| (25) "Excess emissions" means |
| (26) "Excess stack height" means |
| (27) "Existing stationary facility" means a stationary source of air pollutants which has the potential to emit two hundred fifty tons per year or more of any air pollutant. In determining potential to emit, fugitive emissions, to the extent quantifiable, must be counted. For purposes of determining whether a stationary source is an existing stationary facility the term "building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same subsector (i.e., which have the same three-digit code) as described in the NAICS Manual (North American Industrial Classification System, http://www.census.gov/epcd/www/naics.html). |
| (28) "Federal Clean Air Act (FCAA)" means |
| (29) "Federal land manager" means |
| (30) "Fossil fuel-fired steam generator" means |
| (31) "Fugitive dust" means |
| (32) "Fugitive emissions" means |
| (33) "General process unit" means |

| (34) "Good engineering practice (GEP)" refers to |
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| (35) "Incinerator" means |
| (36) "In operation" means |
| (37) "Integral vista" means |
| (38) "Lowest achievable emission rate (LAER)" means |
| (39) "Mandatory Class I federal area" means |
| (40) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the FCAA. Any net emissions increase that is considered significant for volatile organic compounds or nitrogen oxides shall be considered significant for ozone. A physical change or change in the method of operation shall not include: (a) Routine maintenance, repair, and replacement; (b) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Supply Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act; (c) Use of an alternative fuel by reason of an order or rule under section 125 of the FCAA, 42 U.S.C. 7425; (d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste; (e) Use of an alternative fuel or raw material by a stationary source which: (i) The stationary source was capable of accommodating before December 21, 1976, unless such change would be prohibited under any federally enforceable permit condition which was established after December 12, 1976, in a prevention of significant deterioration permit or an order of approval; or (ii) The stationary source is approved to use under any federally-enforceable order of approval or a PSD permit issued by the environmental protection agency; (f) An increase in the hours of operation or in the production rate, unless such change is prohibited under any federally enforceable permit condition which was established after December 21, 1976, in a prevention of significant deterioration permit or a notice of construction approval; (g) Any change in ownership at a stationary source. (41) "Major stationary source" means |

(44) "Modification" means any physical change in, or change in the method of operation of, a stationary source that increases the amount of any air contaminant emitted by such source or that results in the emissions of any air contaminant not previously emitted. The term modification shall be construed

(42) "Masking" means

(43) "Materials handling" means

consistent with the definitions of **modification** in section 111 of the Federal Clean Air Act, and with rules implementing that section.

- (45) "National Emission Standards for Hazardous Air Pollutants (NESHAPS)" means the federal regulations in 40 CFR Part 61.
- (46) "Natural conditions" means
- (47) "Net emissions increase" means:
 - (a) The amount by which the sum of the following exceeds zero:
 - (i) Any increase in **actual emissions** from a particular change or change in method of operation at a source; and
 - (ii) Any other increases and decreases in **actual emissions** at the source that are contemporaneous with the particular change and are otherwise creditable.
 - (b) An increase or decrease in **actual emissions** is contemporaneous with the increase from the particular change only if it occurs between the date five years before construction on the particular change commences and the date that the increase from the particular change occurs.
 - (c) An increase or decrease in **actual emissions** is creditable only if:
 - (i) It occurred no more than one year prior to the date of submittal of a complete notice of construction application for the particular change, or it has been documented by an emission reduction credit, in which case the credit shall expire five years after the date of original issue of the ERC. Any emissions increases occurring between the date of issuance of the ERC and the date when a particular change becomes operational shall be counted against the ERC.
 - (ii) **Ecology** or the **authority** has not relied on it in issuing any permit or order of approval for the source under regulations approved pursuant to 40 CFR 51 Subpart I or the **EPA** has not relied on it in issuing a PSD permit pursuant to 40 CFR 52.21, which order or permit is in effect when the increase in **actual emissions** from the particular change occurs.
 - (d) An increase in **actual emissions** is creditable only to the extent that the new level of **actual emissions** exceeds the old level.
 - (e) A decrease in **actual emissions** is creditable only to the extent that:
 - (i) The old level of **actual emissions** or the old level of allowable emissions, whichever is lower, exceeds the new level of **actual emissions**:
 - (ii) It is federally enforceable at and after the time that actual construction on the particular change begins;
 - (iii) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and
 - (iv) **Ecology** or the **authority** has not relied on it in issuing any permit or order of approval under regulations approved pursuant to 40 CFR 51 Subpart I, the **EPA** has not relied on it in issuing a PSD permit pursuant to 40 CFR 52.21, or **ecology** or the **authority** has not relied on it in demonstrating attainment or reasonable further progress.
 - (f) An increase that results from a physical change at a source occurs when the emission unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed one hundred eighty days.

| (| , |) ''I | New | or | modified | l source' | 'means a | new | source | or a | a modificatio |
|---|---|-------|-----|----|----------|-----------|----------|-----|--------|------|----------------------|
| | | | | | | | | | | | |

- (48) "New source" means:
 - (a) The construction of a stationary source that increases the amount of any **air contaminant** emitted by such source or that results in the emission of any **air contaminant** not previously emitted; and
 - (b) Any other project that constitutes a **new source** under the Federal Clean Air Act.
- (49) "New source performance standards" means the federal regulations in 40 CFR Part 60.
- (50) "Nonattainment area" means
- (51) "Notice of construction application" means a written application to permit a **new source**, **modification**, or the replacement or substantial alteration of control technology at an existing stationary source.
- (__) "NSPS" means new source performance standards.
 (52) "Opacity" means
 (53) "Open burning" means
- (55) "Order of approval" means a regulatory order issued by **ecology** or the **authority** to approve the notice of construction application for a proposed **new source** or **modification**, or the replacement or substantial alteration of control technology at an existing stationary source.
- (56) "Particulate matter" or "particulates" means
- (57) "Particulate matter emissions" means
- (58) "Parts per million (ppm)" means
- (59) **"Person"** means

(54) **"Order"** means

- (60) "PM-10" means
- (61) "**PM-10 emissions**" means
- (62) "Potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.
- (63) "Prevention of significant deterioration" means the program set forth in WAC 173-465-220.

| (04) Projected width means |
|---|
| () "PSD" means prevention of significant deterioration. |
| (65) "Reasonably attributable" means |
| (66) "Reasonably available control technology (RACT)" means |
| (67) "Regulatory order" means |
| (68) "Significant" means, |
| (69) "Significant visibility impairment" means |
| (70) "Source" means all of the emissions unit(s) including quantifiable fugitive emissions, that are located on one or more contiguous or adjacent properties, and are under the control of the same person or persons under common control, whose activities are ancillary to the production of a single product or functionally related groups of products. Activities shall be considered ancillary to the production of a single product or functionally related group of products if they belong to the same subsector (i.e., which have the same three-digit code) as described in the NAICS Manual (North American Industrial Classification System, http://www.census.gov/epcd/www/naics.html). |
| (71) "Source category" means |
| (72) "Stack" means a |
| (73) "Stack height" means |
| (74) "Standard conditions" means |
| (75) "Stationary source" means any building, structure, facility, or installation which emits or may emit any contaminant. This term does not include emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in section 216 of the FCAA. Section 216 defines a nonroad engine as an internal combustion engine (including the fuel system) that is not used in a motor vehicle or a vehicle used solely for competition, or that is not subject to standards promulgated under section 7411 or section 7521. Section 216 defines nonroad vehicle as a vehicle that is powered by a nonroad engine and that is not a motor vehicle or a vehicle used solely for competition. |
| (76) "Sulfuric acid plant" means |
| (77) "Synthetic minor" means |
| (78) "Total reduced sulfur (TRS)" means |
| (79) "Total suspended particulate" means |

- (80) "Toxic air pollutant" means any air pollutant listed in WAC 173-465-380. The term toxic air pollutant may include particulate matter and volatile organic compounds if an individual substance or a group of substances is listed in WAC 173-465-380. The term toxic air pollutant does not include particulate matter and volatile organic as generic classes of compounds.
- (82) "Visibility impairment" means
- (83) "Visibility impairment of Class I areas" means
- () "VOC" means volatile organic compound.

(84) "Volatile organic compound" means:

- (a) Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. This includes any organic compound other than the following, which have negligible photochemical activity: Methane; ethane; methylene chloride (dichloromethane); 1,1,1-trichloroethane (methyl chloroform); 1,1,1-trichloro 2,2,2-trifluoroethane (CFC-113); trichlorofluoromethane (CFC-11); dichlorodifluoromethane (CFC-12); chlorodifluoromethane (CFC-22); trifluoromethane (FC-23); 1,1,2,2-tetrafluoroethane (CFC-114); chloropentafluoroethane (CFC-115); 1,1,1-trifluoro 2,2-dichloroethane (HCFC-123); 1,1,1,2-tetrafluoroethane (HCFC-134a); 1,1-dichloro 1-fluoroethane (HCFC-141b); 1-chloro 1,1-difluoroethane (HCFC-142b); 2-chloro 1,1,1,2-tetrafluoroethane (HCFC-124); pentafluoroethane (HFC-125); 1,1,2,2-tetrafluoroethane (HFC-134); 1,1,1-trifluoroethane (HFC-143a); 1,1-difluoroethane (HFC-152a); and perfluorocarbon compounds which fall into these classes:
 - (i) Cyclic, branched, or linear completely fluorinated alkanes;
 - (ii) Cyclic, branched, or linear completely fluorinated ethers with no unsaturations; and
 - (iii) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine.
- (b) For the purpose of determining compliance with emission limits, VOC will be measured by the appropriate methods in 40 CFR Part 60 Appendix A. Where such a method also measures compounds with negligible photochemical reactivity, these negligibly-reactive compounds may be excluded as VOC if the amount of such compounds is accurately quantified, and such exclusion is approved by **ecology** or the **authority**.
- (c) As a precondition to excluding these negligibly-reactive compounds as VOC or at any time thereafter, **ecology** or the **authority** may require an owner or operator to provide monitoring or testing methods and results demonstrating, to the satisfaction of **ecology** or the **authority**, the amount of negligibly-reactive compounds in the source's emissions.

WAC Chapter 173-465: New Source Review For Ambient and Toxic Air Pollutants

WAC 173-465-010 Purpose and Policy.

- (1) **Purpose.** The purpose of this chapter is to implement systematic control of new air pollutant emissions to prevent air pollution, reduce emissions to the extent reasonably possible, and maintain such levels of air quality as will protect human health and safety and enjoyment of property. The various methods and requirements for achieving this purpose are referred to as "new source review" or "NSR."
- (2) **Policy.** It is the policy of **ecology** to reduce, avoid, or eliminate air pollutants prior to their generation whenever economically and technically practicable. NSR should be construed to facilitate **ecology** or **authority** review of potential emissions.

WAC 173-465-020 Definitions.

The following words and phrases as used in this chapter shall have the following meanings. Note: For copies of the above mentioned rule and any other rule cited in this chapter, contact the Department of Ecology, Records Section, P.O. Box 47600, Olympia, WA 98504-7600. () "Acceptable source impact level" means a concentration of a toxic air pollutant in the ambient air in any area which does not have restricted or controlled public access that is used to evaluate the air quality impacts of a single source. () "Air contaminant" is defined in WAC 173-400-030. (__) "Ambient air" is defined in WAC 173-400-030. () "Ambient air quality standard" is defined in WAC 173-400-030. () "ASIL" means Ambient Source Impact Level. (__) "Authority" is defined in WAC 173-400-030. (__) "Begin actual construction" or "Beginning actual construction" means, in general, initiation of physical on-site construction activities on an emission unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipe work and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

whether categorized by EPA in group A, B, or C.

(__) "Carcinigenic" means, for purposes of WAC 173-465-340 and -350, capable of inducing cancer,

| () "Commenced construction" is defined in WAC 173-400-030. |
|---|
| () " Ecology" is defined in WAC 173-400-030. |
| () "Increased cancer risk of more than one in one hundred thousand" means more than the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one hundred thousand individuals continuously exposed to a Class A toxic air pollutant at a given average dose for a specified time. |
| () "Increased cancer risk of one in one million" means the 95th percent upper bound on the estimated risk of one additional cancer above the background cancer rate per one million individuals continually exposed to a Class A toxic air pollutant at a given average dose for a specified time. |
| () "Major modification" is defined in WAC 173-400-030. |
| () Major stationary source' is defined in WAC 173-400-030. |
| () "Modification" is defined in WAC 173-400-030. |
| () "New Source" is defined in WAC 173-400-030. |
| () "New Source Performance Standard" is defined in WAC 173-400-030. |
| () "New or modified source" is defined in WAC 173-400-030. |
| () "TAP" means Toxic Air Pollutant. |
| () "Threshold limit value-time weighted average" means a concentration limit recommended by the American Conference of Governmental Industrial Hygienists (ACGIH) for a normal eight-hour workday and forty-hour workweek. |
| () "TLV-TWA" means Threshold Limit Value Time-Weighted Average. |
| () "Toxic Air Pollutant" is defined in WAC 173-400-030. |

WAC 173-465-030 New Source Review Fees.

(1) **Applicability.** Every person required to submit a notice of construction application to the department of **ecology** as authorized in RCW 70.94.152 for establishment of any proposed **new source**, **modification**, or emissions unit(s) shall pay fees as set forth in subsections (2) and (3) of this section. Persons required to submit a notice of construction application to a local air **authority** may be required to pay a fee to **ecology** to cover the costs of prevention of significant deterioration (PSD) permits issued pursuant to WAC 173-465-220, site-specific analysis pursuant to WAC 173-465-350, and risk management decisions pursuant to WAC 173-465-360 as set forth in subsection (3) of this section.

Fees assessed under this section shall apply without regard to whether an order of approval is issued or denied.

- (2) **Basic review fees.** All owners or operators of proposed **new source**s or **modifications** are required to pay a basic review fee. The basic review fee covers the costs associated with preapplication assistance, completeness determination, BACT determination, technical review, public involvement and approval/denial orders. Complexity determination shall be based on the project described in the notice of construction application. Basic review fees are shown below:
 - (a) Low complexity **new source**, **modification**, or emission unit (emissions of individual criteria pollutants are all less than one-half of the significance levels established in WAC 173-400-030(67) or emissions of individual **toxic air pollutants** are all less than 2.0 tons/year) one thousand dollars;
 - (b) Moderate complexity **new source**, **mofication**, or emission unit (emissions of one or more individual criteria pollutants are greater than one-half of the significance levels established in WAC 173-400-030(67) or emissions of one or more **toxic air pollutant**s are greater than 2.0 tons/year and less than ten tons/year) five thousand dollars; or
 - (c) High complexity **new source**, **modification**, or emissions unit (emissions of one or more criteria pollutants are greater than the significance levels established in WAC 173-400-030(67) or emissions of one or more **toxic air pollutants** are greater than ten tons/year) fifteen thousand dollars.
 - (d) **Exceptions.** The following fees for **new source** review shall be charged instead of the applicable fees listed in (a) through (c) of this subsection and in subsection (3) of this section:
 - (i) Dry cleaners.....\$200
 - (ii) Gasoline stations\$200
 - (iii) Storage tanks
 - (A) < 20,000 gallons\$200
 - (B) 20,000 100,000 gallons\$500
 - (C) > 100,000.....\$700
 - (iv) Chromic acid plating and anodizing identified in WAC 173-460-060 \$200
 - (v) Solvent metal cleaners identified in WAC 173-460-060 \$200
 - (vi) Abrasive blasting identified in WAC 173-460-060 \$200
 - (vii) New emission units or activities that qualify as insignificant emission units under WAC 173-401-530 whether located at a chapter 401 source or nonchapter 401 source \$200
 - (e) **Additional units.** An owner or operator proposing to build more than one identical emission unit shall be charged a fee for the additional units equal to one-third the basic review fee of the first unit.
- (3) **Additional charges.** In addition to those fees required under subsection (2)(a) through (c) of this section, the following fees will be required as applicable:
 - (a) Prevention of significant deterioration review (includes **ecology** review of local air **authority** sources) ten thousand dollars, or less in relatively simple administrative cases, such as when no public hearing is conducted.;
 - (b) Establishing LAER and offset requirements for a **major stationary source** or **major modification** proposing to locate in a nonattainment area ten thousand dollars;
 - (c) Site-specific toxics review as required under WAC 173-465-350 seven thousand five hundred dollars;
 - (d) Risk managment review as required under WAC 173-465-360 five thousand dollars;
 - (e) State Environmental Policy Act review (where **ecology** is the lead agency):
 - (i) Determination of nonsignificance (DNS) and environmental checklist review two hundred dollars; or

- (ii) Environmental impact statement (EIS) review two thousand dollars;
- (iii) Where more than one **ecology** program is charging a fee for reviewing or preparing SEPA documents, **ecology** will not charge a SEPA review fee as part of the **new source** review fees;
- (f) Case-by-case MACT determinations required for a **new source** or **modification** under Section 112(g) or Section 112(j) of the FCAA five thousand dollars.
- (4) **Small business fee reduction.** The **new source** review fee identified in subsections (2) and (3) of this section may be reduced for a small business.
 - (a) To qualify for the small business **new source** review fee reduction, a business must meet the requirements of "small business" as defined in RCW 43.31.025.
 - (b) To receive a fee reduction, the owner or operator of a small business must include information in the application demonstrating that the conditions of (a) of this subsection have been met. The application must be signed:
 - (i) By an authorized corporate officer in the case of a corporation;
 - (ii) By an authorized partner in the case of a limited or general partnership; or
 - (iii) By the proprietor in the case of a sole proprietorship.
 - (c) **Ecology** may verify the application information and if the owner or operator has made false statements, deny the fee reduction request and revoke previously granted fee reductions.
 - (d) For small businesses determined to be eligible under (a) of this subsection, the **new source** review fee shall be reduced to the greater of:
 - (i) Fifty percent of the **new source** review fee; or
 - (ii) Two hundred fifty dollars.
 - (e) If due to special economic circumstances, the fee reduction determined under (d) of this subsection imposes an extreme hardship on a small business, the small business may request an extreme hardship fee reduction. The owner or operator must provide sufficient evidence to support a claim of an extreme hardship. The factors which **ecology** may consider in determining whether an owner or operator has special economic circumstances and in setting the extreme hardship fee include: Annual sales; labor force size; market conditions which affect the owner's or operator's ability to pass the cost of the **new source** review fees through to customers; and average annual profits. In no case will a **new source** review fee be reduced below one hundred dollars.
- (5) **Fee reductions for pollution prevention initiatives. Ecology** may reduce the fees defined in subsections (2) and (3) of this section where the owner or operator of the proposed source demonstrates that approved pollution prevention measures will be used.
- (6) Fee payments. Fees specified in subsections (2) through (5) of this section shall be paid at the time a notice of construction application is submitted to the department. A notice of construction application is considered incomplete until ecology has received the appropriate new source review payment. Additional charges assessed pursuant to subsection (3) of this section shall be due thirty days after receipt of an ecology billing statement. All fees collected under this regulation shall be made payable to the Washington department of ecology.
- (7) **Dedicated account.** All **new source** review fees collected by the department from permit program sources shall be deposited in the air operating permit account created under RCW 70.94.015. All **new source** review fees collected by the department from nonpermit program sources shall be deposited in the **air pollution** control account.

- (8) **Tracking revenues, time, and expenditures. Ecology** shall track revenues collected under this subsection on a source-specific basis. **Ecology** shall track time and expenditures on the basis of complexity categories.
- (9) **Periodic review.** Ecology shall review and, as appropriate, update this section.

WAC 173-465-040 BACT (Best available control technology).

- (1) BACT means an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under chapter 70.94 RCW emitted from or which results from any new or modified stationary source, which the permitting **authority**, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or **modification** through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant.
- (2) In no event shall application of the BACT result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard under 40 CFR Part 60 and Part 61, as they exist on July 1, 2000.
- (3) Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under the definition of BACT in the Federal Clean Air Act as it existed prior to enactment of the Clean Air Act Amendments of 1990.
- (4) **Best available control technology for toxics** (**T-BACT**) applies to each toxic air pollutant (TAP) discharged or mixture of TAPs, taking in account the potency, quantity, and toxicity of each toxic air pollutant or mixture of TAPs discharged in addition to the meaning given in WAC 173-400-030(10).

WAC 173-465-110 Applicability

(1) **Applicability.** This chapter applies state-wide except where an **authority** has adopted and is implementing its own **new source** review regulation. **Ecology** shall have the sole **authority** to administer WAC 173-465-220, 350, and 360 (PSD, site-specific analysis, and risk management).

(2) Projects subject to NSR.

- (a) All **new source**s and **modifiations** are subject to NSR except for those sources exempt under subsection (3) or (4) of this section.
- (b) The exception for those sources exempt under subsection (3) or (4) of this section does not apply to the following:
 - (i) Any project that qualifies as construction, reconstruction, or **modification** of an affected facility, within the meaning of the **New Source Performance Standards**, except Part AAA (Wood stoves);
 - (ii) Any project that qualifies as a **new or modified source** within the meaning of 40 CFR 61.02 (except for asbestos demolition and renovation projects subject to 40 CFR 61.145);

- (iii) Any project that qualifies as a **new source** within the meaning of 40 CFR 63.2 (National Emission Standards for Hazardous Air Pollutants);
- (iv) Any project that qualifies as a **major stationary source**, as defined in WAC 173-400-030, or a **major modification**, as defined in WAC 173-400-030; or
- (v) Any project that requires an increase in a plant-wide cap or unit specific emission limit.

(3) Exemptions based on emissions thresholds.

- (a) **De minimis.** A project is exempt from NSR if all the following conditions are satisfied:
 - (i) each of the threshold levels listed in the emission threshold table in this subsection is greater than either:
 - (A) the PTE (potential to emit) of a new emissions unit; or,
 - (B) the increase in the actual emissions of a modification to an existing emissions unit, and
 - (ii) The conditions of (b) of this subsection are met;

(b) De minimis procedures.

- (i) The owner or operator seeking to exempt a project from **new source** review under this section shall notify **ecology** or the **authority** prior to beginning actual construction on the project.
- (ii) **Ecology** or the **authority** may request a brief project summary, which the owner or operator shall file.
- (iii) If **ecology** or the **authority** determines that the project will have more than a *de minimis* impact on air quality, **ecology** or the **authority** may require the filing of a notice of construction application.
- (iv) **Ecology** or the **authority** may require the owner or operator to demonstrate that the emissions increase from the new emissions unit is smaller than all of the thresholds listed in the emission threshold table in this subsection.
- (v) The owner/operator may begin actual construction on the project thirty-one days after ecology or the authority receives the summary, unless ecology or the authority notifies the owner/operator within thirty days that the proposed new source or modification requires a notice of construction application.

(c) Exemption threshold table:

| POLLUTANT | DE MINIMIS THRESHOLD LEVEL (POUNDS PER YEAR) |
|------------------|--|
| Total Suspended | 1250 |
| Particulates | |
| PM10 | 750 |
| Sulfur Oxides | 4000 |
| Nitrogen Oxides | 4000 |
| Volatile Organic | 4000 |
| Compounds, total | |
| Carbon Monoxide | 10000 |
| Lead | 10 |

| Ozone Depleting | 2000 |
|-------------------------|-----------------|
| Substances in | |
| Aggregate (the sum of | |
| Class I and/or Class II | |
| substances as defined | |
| in FCAA Title VI and | |
| 40 CFR Part 82) | |
| toxic air pollutants | As specified in |
| | WAC 173- |
| | 465-380. |

(4) Exemptions based on emission unit type and activity. Except as provided in subsection (2) of this section, establishment of a new emission unit that falls within one of the categories listed below is exempt from new source review. Modification of any emission unit listed below is exempt from new source review, provided that the modified unit continues to fall within one of the listed categories. The installation or modification of a unit exempt under this subsection does not require the filing of a Notice of Construction Application.

(a) Maintenance/construction:

- (i) Cleaning and sweeping of streets and paved surfaces;
- (ii) Concrete application, and installation;
- (iii) Dredging wet spoils handling and placement;
- (iv) Paving application and maintenance, excluding asphalt plants;
- (v) Plant maintenance and upkeep activities such as grounds keeping, general repairs, routine house keeping, routine plant painting, welding, cutting, brazing, soldering, plumbing, retarring roofs, etc.;
- (vi) Plumbing installation, plumbing protective coating application and maintenance activities;
- (vii) Roofing application;
- (viii) Insulation application and maintenance, excluding products for resale;
- (ix) Janitorial services and consumer use of janitorial products.
- (x) Demolition and renovation projects involving asbestos removal and disposal.
- (xi) Routine maintenance or repair requires equivalent replacement of **air pollution** control equipment; [pursuant to WAC 173-400-114]
- (xii) Nonprocess fugitive emissions of **toxic air pollutant**s from stationary sources, such as construction sites, unpaved roads, coal piles, waste piles, and fuel and ash handling operations.

(b) Storage tanks:

- (i) Lubricating oil storage tanks except those facilities that are wholesale or retail distributors of lubricating oils;
- (ii) Polymer tanks and storage devices and associated pumping and handling equipment used for solids dewatering and flocculation;
- (iii) Storage tanks, reservoirs, pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions;
- (iv) Process and white water storage tanks;
- (v) Operation, loading, and unloading of storage tanks and storage vessels, with lids or other appropriate closure and less than 260 gallon capacity (35 cft);
- (vi) Operation, loading, and unloading of storage tanks, ≤ 1100 gallon capacity, with lids or other appropriate closure, not for use with materials containing toxic air pollutants, max. VP 550 mm Hg @21°C;

- (vii) Operation, loading, and unloading storage of butane, propane, or liquefied petroleum gas with a vessel capacity less than 40,000 gallons;
- (viii) Tanks, vessels, and pumping equipment, with lids or other appropriate closure for storage or dispensing of aqueous solutions of inorganic salts, bases and acids.
- (ix) Containers such as tanks, barrels, drums, cans, and buckets are exempt from the requirements of this chapter unless equipped with a vent other than those required solely as safety pressure release devices.
- Because it can be difficult to determine requirements for storage tanks, an owner or operator should contact **ecology** or the **authority** to determine the exemption status of storage tanks prior to their installation.
- (c) **Heat input:** A project with combined aggregate heat inputs of combustion units ≤ (less than or equal to) all of the following:
 - (i) 500,000 Btu/hr using coal with $\leq 0.5\%$ sulfur or other fuels with $\leq 0.5\%$ sulfur;
 - (ii) 500,000 Btu/hr used oil, per the requirements of RCW 70.94.610;
 - (iii) 400,000 Btu/hr wood waste or paper;
 - (iv) 1,000,000 Btu/hr using kerosene, #1, or #2 fuel oil and with $\leq 0.05\%$ sulfur;
 - (v) 4,000,000 Btu/hr using natural gas, propane, or LPG.

(d) Material handling:

- (i) Continuous digester chip feeders;
- (ii) Grain elevators not licensed as warehouses or dealers by either the Washington state department of agriculture or the U.S. Department of Agriculture;
- (iii) Storage and handling of water based lubricants for metal working where organic content of the lubricant is $\leq 10\%$;
- (iv) Equipment used exclusively to pump, load, unload, or store high boiling point organic material in tanks less than one million gallon, material with initial atmospheric boiling point not less than 150°C or vapor pressure not more than 5 mm Hg @21°C, with lids or other appropriate closure.
- (v) Gasoline dispensing facilities, as defined in WAC chapters 490 and 491, with an annual throughput less than 1.5 million gallons.

(e) Water treatment:

- (i) Septic sewer systems, not including active wastewater treatment facilities;
- (ii) NPDES permitted ponds and lagoons used solely for the purpose of settling suspended solids and skimming of oil and grease;
- (iii) De-aeration (oxygen scavenging) of water where **toxic air pollutant**s as defined in chapter 173-460 WAC are not emitted;
- (iv) Process water filtration system and demineralizer vents;
- (v) Sewer manholes, junction boxes, sumps and lift stations associated with wastewater treatment systems;
- (vi) Demineralizer tanks:
- (vii) Alum tanks;
- (viii) Clean water condensate tanks.

(f) Environmental chambers and laboratory equipment:

- (i) Environmental chambers and humidity chambers not using **toxic air pollutant** gases;
- (ii) Gas cabinets using only gases that are not toxic air pollutants;
- (iii) Installation or **modification** of a single laboratory fume hood;
- (iv) Laboratory calibration and maintenance equipment.

(g) Monitoring/quality assurance/testing:

(i) Equipment and instrumentation used for quality control/assurance or inspection purpose;

- (ii) Hydraulic and hydrostatic testing equipment;
- (iii) Sample gathering, preparation and management;
- (iv) Vents from continuous emission monitors and other analyzers.

(h) Miscellaneous:

- (i) Single-family residences and duplexes;
- (ii) Plastic pipe welding;
- (iii) Primary agricultural production activities including soil preparation, planting, fertilizing, weed and pest control, and harvesting;
- (iv) Comfort air conditioning;
- (v) Flares used to indicate danger to the public;
- (vi) Natural and forced air vents and stacks for bathroom/toilet activities;
- (vii) Personal care activities;
- (viii) Recreational fireplaces including the use of barbecues, campfires, and ceremonial fires;
- (ix) Tobacco smoking rooms and areas;
- (x) Noncommercial smokehouses;
- (xi) Blacksmith forges for single forges;
- (xii) Vehicle maintenance activities, not including vehicle surface coating;
- (xiii) Vehicle or equipment washing (see (c) of this subsection for threshold for boilers);
- (xiv) Wax application;
- (xv) Oxygen, nitrogen, or rare gas extraction and liquefaction equipment not including internal and external combustion equipment;
- (xvi) Ozone generators and ozonation equipment;
- (xvii) Solar simulators;
- (xviii) Ultraviolet curing processes, to the extent that **TAP**s are not emitted;
- (xix) Electrical circuit breakers, transformers, or switching equipment installation or operation;
- (xx) Pulse capacitors;
- (xxi) Pneumatically operated equipment, including tools and hand held applicator equipment for hot melt adhesives;
- (xxii) Fire suppression equipment;
- (xxiii) Recovery boiler blow-down tank;
- (xxiv) Screw press vents;
- (xxv) Drop hammers or hydraulic presses for forging or metal working;
- (xxvi) Production of foundry sand molds, unheated and using binders less than 0.25% free phenol by sand weight;
- (xxvii) Kraft lime mud storage tanks and process vessels;
- (xxviii) Lime grits washers, filters and handling;
- (xxix) Lime mud filtrate tanks;
- (xxx) Lime mud water;
- (xxxi) Stock cleaning and pressurized pulp washing down process of the brown stock washer;
- (xxxii) Natural gas pressure regulator vents, excluding venting at oil and gas production facilities and transportation marketing facilities;
- (xxxiii) Nontoxic air pollutant solvent cleaners less than 10 square feet air-vapor interface with solvent vapor pressure not more than 30 mm Hg @21°C;
- (xxxiv) Surface coating, aqueous solution or suspension containing ≤ 1% (by weight) VOCs, and/or **TAP**s;
- (xxxv) Cleaning and stripping activities and equipment using solutions having $\leq 1\%$ (by weight) **VOC**s and/or **TAP**s; on metallic substances, acid solutions are not exempt;

(xxxvi) Dip coating operations, using materials less than 1% **VOC**s (by weight) and/or **TAP**s. (xxxvii) Process vents subject to 40 C.F.R. Parts 264 and 265, Subpart AA.

WAC 173-465-120 Notice of Construction Application.

- (1) Notice of Construction Application.
 - (a) The owner or operator of a project subject to NSR shall file a notice of construction application.
 - (b) The applicant shall not **begin actual construction** until the applicable notice of construction has been approved.
 - (c) **New source** review of a **modification** shall be limited to the emission unit or units proposed to be modified and the air contaminants whose emissions would increase as a result of the **modification**.
- (2) **Portable sources.** For portable sources which locate temporarily at particular sites, the owner(s) or operator(s) shall be allowed to operate at the temporary location without filing a notice of construction application, providing that the owner(s) or operator(s) notifies **ecology** or the **authority** of intent to operate at the new location at least thirty days prior to starting the operation, and supplies sufficient information to enable **ecology** or the **authority** to determine that the operation will comply with the emission standards for a **new source**, and will not cause a violation of applicable **ambient air quality standards** and, if in a nonattainment area, will not interfere with scheduled attainment of ambient standards. The permission to operate shall be for a limited period of time (one year or less) and **ecology** or the **authority** may set specific conditions for operation during that period. A temporary source shall be required to comply with all applicable emission standards.
- (3) **Partial Exemptions based on sources.** The following sources are generally exempt from the requirements of WAC 173-465-310, and -330. However, **ecology** or the **authority** may, on a case-by-case basis, require compliance with these sections if **ecology** or the **authority** determines that the amount of emissions, nature of pollutant, or source location indicate that the ambient impact should be evaluated.
 - (a) Perchloroethylene dry cleaners
 - (b) Gasoline dispensing facilities, as defined in WAC chapters 490 and 491, with an annual throughput NOT less than 1.5 million gallons.
 - (c) Solvent metal cleaners
 - (d) Chromic acid plating and anodizing
 - (e) Abrasive blasting
- (4) **Completeness determination.** Within thirty days of receipt of a notice of construction application, the **ecology** or the **authority** shall either notify the applicant in writing that the application is complete or notify the applicant in writing of all additional information necessary, based upon review of information already supplied, to complete the application. For a project subject to PSD review under WAC 173-465-420, a completeness determination includes a determination that the application provides all information required to conduct PSD review.

(5) **Determination.**

(a) Within thirty days after receipt of all information required, **ecology** or the **authority** shall make preliminary determinations on the matters set forth in this section;

- (b) Within sixty days of receipt of a complete application, **ecology** or the **authority** shall either (i) issue a final decision on the application,
 - (ii) for those projects subject to public notice, initiate notice and comment procedures under WAC 173-400-171 on a proposed decision, followed as promptly as possible by a final decision, or
 - (iii) if **ecology** or the **authority** finds that the conditions in this section are not satisfied, issue an order for the prevention of construction, installation, or establishment of the source(s).
- (c) A person seeking approval to construct or modify a source that requires an operating permit may elect to integrate review of the operating permit application or amendment required under RCW 70.94.161 and the notice of construction application required by this section. A notice of construction application designated for integrated review shall be processed in accordance with operating permit program procedures and deadlines.
- (d) Every final determination on a notice of construction application shall be reviewed and signed prior to issuance by a professional engineer or staff under the direct supervision of a professional engineer in the employ of **ecology** or the **authority**.
- (e) If the **new source** is a **major stationary source** or the change is a **major modification**, **ecology** or the **authority** shall submit any control technology determination included in a final order of approval to the RACT/BACT/LAER clearinghouse maintained by **EPA**.
- (6) **Operation and maintenance plan.** As a condition of notice of construction approval, prior to start up, **ecology** or the **authority** may require a plan for the operation and maintenance of all equipment and procedures to assure continuous compliance with this chapter.
 - (a) A copy of the plan shall be filed with **ecology** or the **authority** upon request.
 - (b) The plan shall reflect good industrial practice and may include operating parameters and maintenance procedures, and shall be updated to reflect any changes in good industrial practice.
 - (c) Submittal of all plans should coincide with the authorities reporting requirements where applicable.
- (7) **Construction time limitations.** Approval to construct or modify a stationary source shall become invalid if the owner or operator has not **commenced construction** within eighteen months after receipt of such approval, if construction is discontinued for a period of eighteen months or more, or if construction is not completed within a reasonable time. **Ecology** or the **authority** may extend the eighteen-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project. Each phase must **commence construction** within eighteen months of the projected and approved commencement date.
- (8) **Appeals.** An order of approval, any conditions contained in an order of approval, or the denial of a notice of construction application may be appealed to the pollution control hearings board as provided in chapter 43.21B RCW. **Ecology** or the **authority** shall promptly mail copies of each order approving or denying a notice of construction application to the applicant and to any other party who submitted timely comments on the application, along with a notice advising parties of their rights of appeal to the Pollution Control Hearings Board and, where applicable, to the **EPA** Environmental Appeals Board.

(9) Change of conditions.

(a) The owner or operator may request, at any time, a change in conditions of an approval order and **ecology** or the **authority** may approve such a request provided **ecology** or the **authority** finds that:

- (i) The change in conditions will not cause the **air contaminant** source to exceed an emissions standard;
- (ii) No ambient air quality standard or PSD increment will be exceeded as a result of the change;
- (iii) The change will not adversely impact the ability of **ecology** or the **authority** to determine compliance with an emissions standard; and
- (iv) The revised order will continue to require BACT, as defined at the time of the original approval, for each **new source** and **modification** approved by the order except where the Federal Clean Air Act requires LAER.
- (b) Actions taken under this subsection are subject to the public involvement provisions of WAC 173-400-171.
- (c) This rule does not prescribe the exact form such requests must take. However, if the request is filed as a notice of construction application, that application shall be acted upon using the timelines found in subsections (4) and (5) of this section. The fee schedule found in WAC 173-465-190 shall also apply to requests filed as notice of construction applications.

WAC 173-465-130: Requirements in nonattainment areas.

Ecology or an **authority** reviewing a notice of construction application to establish a **new source** or **modification** in a nonattainment area shall issue an order of approval containing such conditions as are reasonably necessary to assure compliance with this chapter if **ecology** or the **authority** determines that the proposed project satisfies each of the following requirements:

- (1) **Emission standards.** The proposed **new source** or **modification** will comply with:
 - (a) all applicable New Source Performance Standards,
 - (b) national emission standards for hazardous air pollutants;
 - (c) emission standards adopted under chapter 70.94 RCW;
 - (d) the applicable emission standards of the **authority**;
 - (e) comply with ambient impact requirements of WAC 173-465-330 for **TAP**s;and,
 - (f) the source will be in accord with all other applicable federal, state, and authority **air pollution** control rules and regulations.
- (2) **Requirements.** The proposed **new source** or **modification** will employ BACT for all **air contaminants** not previously emitted or whose emissions would increase as a result of the **new source** or **modification**, except to the extent that it must achieve LAER under subsection (5) of this section.
- (3) **Impacts.** The proposed **new source** or **modification**:
 - (a) will not cause an exceedance of any ambient air quality standard,
 - (b) will comply with the requirements for reasonable further progress established by the state implementation plan, and
 - (c) will comply with WAC 173-465-140 for all contaminants for which the area has not been designated nonattainment.
- (4) **Major.** If the proposed new source is a **major stationary source** or the proposed modification is a **major modification**:

- (a) **ecology** or the **authority** has determined, based on review of an analysis performed by the source of alternative sites, sizes, production processes, and environmental control techniques, that the benefits of the project significantly outweigh the environmental and social costs imposed as a result of its location, construction, or **modification**.
- (b) The owner or operator has demonstrated that all **major stationary source**s owned or operated by such person (or by any entity controlling, controlled by, or under common control with such person) in Washington are subject to emission limitations and are in compliance, or on a schedule for compliance, with all applicable emission limitations and standards under the Federal Clean Air Act, including all rules contained in an **EPA**-approved state implementation plan; and,
- (c) Ecology or the **authority** has complied with the visibility protection review requirements of 40 CFR 52.28(c) except for (c)(4)(i), (d), (e), (g), and (h), and determined that the project meets the criteria set forth in 40 CFR 52.28(g). For purposes of this subsection, definitions referenced in 40 CFR 52.28(b) are incorporated by reference, except that the term "visibility protection area" means any Class I area, and terms defined in WAC 173-400-030 shall have the meanings defined in that section. References in 40 CFR 52.28 to "the Administrator" shall mean theagency (either **ecology** or the **authority**) processing the notice of construction application.
- (d) it will achieve LAER for each of those contaminants for which the area has been designated nonattainment and for which the proposed **new source** or **modification** is major.
- (5) **Major.** If the proposed **new source** or the proposed **modification** is major for the contaminant for which the area is designated nonattainment, allowable emissions from the proposed **new source** or **modification** of that contaminant are offset by reductions in actual emissions from existing sources in the nonattainment area. Emission offsets must be sufficient to ensure that total allowable emissions from existing **major stationary sources** in the nonattainment area, **new or modified source** which are not **major stationary sources**, and the proposed **new or modified source** will be less than total actual emissions from existing sources (prior to submittal of the application) so as to represent (when considered with the nonattainment provisions of section 172 of the FCAA) reasonable further progress. All offsetting emission reductions must satisfy the following requirements:
 - (a) The proposed new level of allowable emissions of the source or emission unit(s) providing the reduction must be less than the current level of actual emissions of that source or emissions unit(s). No emission reduction can be credited for actual emissions which exceed the current allowable emissions of the source or emissions unit(s) providing the reduction. Emission reductions imposed by local, state, or federal regulations, regulatory orders, or permits cannot be credited.
 - (b) The emission reductions must provide for a net air quality benefit. For marginal ozone nonattainment areas, the total emissions of volatile organic compounds or total emissions of nitrogen oxides are reduced by a ratio of 1.1 to 1 for the area in which the **new source** or **modification** is located. For any other nonattainment area, the emissions offsets must provide a positive net air quality benefit in the nonattainment area. Determinations on whether emissions offsets provide a positive net air quality benefit will be made in accordance with the guidelines contained in 40 CFR 51 Appendix S.
 - (c) If the offsets are provided by another source, the reductions in emissions from that source must be federally enforceable by the time the **new or modified source** commences operation. The **new source** or **modification** may not commence operation before the date such reductions are actually achieved. An emission reduction credit issued under WAC 173-400-131 may be used to satisfy some or all of the offset requirements of this subsection.

(6) **PSD.** If the proposed **new source** is a **major stationary source** or the proposed **modification** is a **major modification** for the purposes of the PSD program described in WAC 173-465-320, it meets the requirements of that program for all contaminants for which the area has not been designated nonattainment.

WAC 173-465-140: Requirements for new sources and modifications in attainment or unclassifiable areas.

Ecology or an **authority** reviewing an application to establish a **new source** or **modification** in an area that is in attainment or unclassifiable for any air contaminant the **new source** or **modification** would emit and that is in attainment or unclassifiable for ozone if the proposed **new or modified source** would emit VOCs or NOx, shall issue an order of approval, which order shall contain such conditions as are reasonably necessary to assure the maintenance of compliance with this chapter, if they determine that the proposed project satisfies all of the following requirements:

- (1) **Emission standards** The proposed **new source** or **modification** will comply with
 - (a) all applicable New Source Performance Standards,
 - (b) all applicable national emission standards for hazardous air pollutants,
 - (c) all applicable emission standards adopted under chapter 70.94 RCW,
 - (d) for sources regulated by an authority, the applicable emission standards of that authority, and,
 - (e) comply with ambient impact requirements of WAC 173-465-330 for **TAP**s; and,
 - (f) the source will be in accord with all other applicable federal, state, and authority **air pollution** control rules and regulations.
- (2) **Requirements:** The proposed **new source** or **modification** will
 - (a) employ BACT for all **air contaminants** not previously emitted or whose emissions would increase as a result of the **new source** or **modification**.
- (3) **Impact.**
 - (a) Allowable emissions from the proposed **new source** or **modification** will neither
 - (i) delay the attainment date for an area not in attainment, nor
 - (ii) cause or contribute to an exceedance of any **ambient air quality standard**.
 - (b) This requirement will be considered to be met if the projected impact of the allowable emissions from the proposed **new source** or the projected impact of the increase in allowable emissions from the proposed **modification** at any location within a nonattainment area does not exceed the following levels for the pollutant(s) for which the area has been designated nonattainment:
 - (i) Impact table.

| Pollutant | Annual Average | 24-Hour | 8-Hour Average | 3-Hour Average | 1-Hour Average |
|------------|----------------|---------|----------------|----------------|----------------|
| CO (ma/m²) | | 0.5 | | 2 | |
| (mg/m3) | | | | | |
| SO2 | 1.0 | 5 | | 25 | 30 |
| (ug/m3) | | | | | |
| PM10 | 1.0 | 5 | | | |
| (ug/m3) | | | | | |
| NO2 | 1.0 | | | | |
| (ug/m3) | | | | | |

⁽ii) An offsetting emission reduction may be used to satisfy some or all of the requirements of this subsection.

- (4) **PSD.** If the application is for a **major stationary source** or a **major modification**, for purposes of the PSD program described in WAC 173-465-320,
 - (a) it meets all applicable requirements of that chapter, and
 - (b) **ecology** or the **authority** has complied with the visibility protection review requirements of 40 CFR 52.27(d) through (f), as in effect on March 3, 1993, and has determined that the source would not cause an adverse impact upon visibility. References in 40 CFR 52.27 to "the Administrator" shall mean the agency (either **ecology** or the **authority**) processing the notice of construction application.

WAC 173-465-210 Standards of Performance for New Sources (NSPS).

Title 40, Code of Federal Regulations, Part 60 (standards of performance for **new source**s), as in effect on July 1, 2000, is adopted by reference except for sections 60.5 (determination of construction or **modification**) and 60.6 (review of plans). The term "administrator" in 40 CFR Part 60 shall mean both the administrator of **EPA** and the director of **Ecology**.

WAC 173-465-220 Prevention of significant deterioration (PSD)

- Subsections 40 CFR 52.21(b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n), (o), (p), (r), (t), (v), and (w), Prevention of Significant Deterioration of Air Quality, as in effect on July 7, 2000, are incorporated by reference with the following additions and alterations:
 - (1) **Construction of "administrator."** In 40 CFR 52.21 (b)(17), federally enforceable, (f)(l)(v), (f)(3), and (f)(4)(i), exclusions from increment consumption, (g), redesignation, (l) and (2), air quality models, (p)(2), federal land manager, and (t), disputed permits or redesignations, the word "administrator" shall mean the administrator of **EPA**. In 40 CFR 52.21 (b)(3)(iii) administrator shall mean both the administrator of **EPA** and the director of **ecology**.
 - (2) **Contemporaneous.** Subpart 40 CFR 52.21 (b)(3)(ii) is changed to read: "An increase or decrease in **actual emissions** is contemporaneous with the increase from the particular change only if it occurs between the date ten years before construction on the particular change commences and the date that the increase from the particular change occurs. If a decrease occurred more than one year prior to the date of submittal of the notice of construction application for the particular change it can only be credited if the decrease has been documented by an emission reduction credit."
 - (3) **Public participation.** Subpart 40 CFR 51.166(q) public participation, as in effect July 7, 2000, is hereby incorporated by reference except that in 40 CFR 51.166(q)(2)(iv), the phrase "specified time period" shall mean thirty days and the word "administrator" shall mean the **EPA** administrator.
 - (4) **Class I areas.** Subsection 40 CFR 51.166(p)(1), Sources Impacting Federal Class I areas additional requirements Notice to **EPA**, as in effect on March 3, 1993, is herein incorporated by reference.
 - (5) **Secondary emissions.** Subpart 40 CFR 52.21(b)(18) is changed to read:

 Secondary emissions means emissions which would occur as a result of the construction or operation of a **major stationary source** or **major modification**, but do not come from the **major stationary source** or **major modification** itself. For the purpose of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the **major stationary source** or **major modification** which causes the secondary emissions. Secondary emissions may include, but are not limited to:
 - (a) Emissions from ships or trains coming to or from the new or modified stationary source; and
 - (b) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the **major stationary source** or **major modification**.
 - (6) **Significant.** The definition of "significant" in 40 CFR 52.21(b)(23) is changed to exclude from the list of pollutants which may trigger PSD review any pollutant listed under FCAA §112.

WAC 173-465-310 Requirement to quantify TAP emissions.

(1) New sources and modifications.

- (a) In a notice of construction application, an owner or operator of a new source or **modification**shall quantify emissions of each **TAP**, or combination of **TAP**s that may be discharged after applying required control technology.
- (b) Emissions shall be quantified in sufficient detail to determine whether the source complies with the requirements of this chapter.
- (c) The information shall be submitted to **ecology** or the **authority**.
- (2) **Level of detail.** An **acceptable source impact level** analysis under WAC 173-465-130, may be based on a conservative estimate of emissions that represents good engineering judgment. If compliance with WAC 173-465-120 cannot be demonstrated, more precise emission estimates shall be used to demonstrate compliance with the site-specific analysis of WAC 173-465-140.

(3) Mixtures of toxic air pollutants.

- (a) An owner or operator of a source that may discharge more than one **toxic air pollutant** may demonstrate compliance with WAC 173-465-330 by:
 - (i) Quantifying emissions and performing modeling for each TAP individually; or
 - (ii) Calculating the sum of all **TAP** emissions and performing modeling for the total **TAP** emissions and comparing maximum ambient levels to the smallest **ASIL**; or
 - (iii) Equivalent procedures may be used if approved by **ecology**.
- (b) **Dioxin and furan emissions.** Dioxin and furan emissions shall be considered together as one **TAP** and expressed as an equivalent emission of 2,3,7,8 TCDD based on the relative potency of the isomers in accordance with **EPA** guidelines.
 - Note: Copies of **EPA** Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and dibenzofurans (CDDs and CDFs), 1989 Update are available by requesting EPA/625/3-89/016, March 1989 from ORD Publications (513) 684-7562.
- (c) **Polyaromatic hydrocarbon (PAH) emissions.** The owner or operator of a source that may emit a mixture of polyaromatic hydrocarbon emissions shall quantify the following PAHs and shall consider them together as one **TAP** equivalent in potency to benzo(a)pyrene: benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indenol(1,2,3-cd)pyrene, benzo(a)pyrene. The acceptable source impact analysis of WAC 173-465-340 shall be conducted using the polyaromatic hydrocarbon emission **ASIL** contained in WAC 173-465-380.
- (d) **Uncontrolled roof vent emissions from primary aluminum smelters.** The owner or operator of a primary aluminum smelter that may emit a mixture of polyaromatic hydrocarbons from uncontrolled roof vents shall quantify PAH emissions using either of the following methods:
 - (i) Quantify PAH emissions using the procedures in (c) of this subsection; or
 - (ii) Multiply the total particulate emission mass from the uncontrolled roof vents by the percent of the particulate that is extractable organic matter. The percent extractable organic matter shall be considered one percent of total particulate matter unless **ecology** determines that there is compelling scientific data which demonstrates that the use of this value is inappropriate. The acceptable source impact analysis of WAC 173-465-340 shall be conducted using the primary aluminum smelter uncontrolled roof vent PAH emission **ASIL** contained in WAC 173-465-380. Note: For example, 100 grams of particulate air emission mass times one percent yields one gram of PAH emissions.

WAC 173-465-320 Generic BACT.

(1) **Generic BACT.** Satisfaction of the performance requirements listed below fulfill the BACT requirement for those particular sources. **Authorities** other than **Ecology** may develop and require performance requirements in lieu of BACT provided that **ecology** approves the performance requirements as equivalent to BACT.

(2) Abrasive blasting.

- (a) Abrasive blasting shall be performed inside a booth or hangar designed to capture the blast grit or overspray.
- (b) Outdoor blasting of structures or items too large to be reasonably handled indoors shall employ control measures such as curtailment during windy periods and enclosure of the area being blasted with tarps.
- (c) Outdoor blasting shall be performed with either steel shot or an abrasive containing less than one percent (by mass) which would pass through a No. 200 sieve.
- (d) All abrasive blasting with sand shall be performed inside a blasting booth or cabinet.
- (3) **Chromic acid plating and anodizing.** The facility-wide uncontrolled hexavalent chromium emissions from plating or anodizing tanks shall be reduced by at least ninety-five percent using either of the following control techniques:
 - (a) An antimist additive or other equally effective control method approved by **ecology** or **authority**; or
 - (b) The tank is equipped with:
 - (i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and
 - (ii) An emission control system which limits hexavalent chromium emissions to no more than 0.15 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-five percent.
- (4) **Chromic acid plating and anodizing (greater than 1 kilogram).** If the facility-wide hexavalent chromium emissions from chromic acid plating and anodizing are greater than 1 kilogram per year after the application of control techniques required by subsection (3) of this section, the facility-wide hexavalent chromium emissions shall be reduced by at least ninety-nine percent using either of the following control techniques:
 - (a) An antimist additive or other equally effective control method approved by **ecology** or the **authority**; or
 - (b) The tank is equipped with:
 - (i) A capture system which represents good engineering practice and which shall be in place and in operation at all times electrical current is applied to the tank; and
 - (ii) An emissions control system which limits hexavalent chromium emissions to no more than 0.03 milligrams per ampere-hour of electrical charge applied to the tank or uncontrolled emissions shall be reduced by ninety-nine percent.

(5) Solvent metal cleaners.

(a) Any solvent metal cleaner shall include all of the following equipment:

- (i) A cover for the solvent tank which shall be closed at all times except when processing work in the degreaser. However, the cover shall be closed to the maximum extent possible when parts are being degreased;
- (ii) A facility for draining cleaned parts such that the drained solvent is returned to the solvent tank;
- (iii) For cold solvent cleaners, a freeboard ratio greater than or equal to 0.75;
- (iv) Vapor degreasers shall have:
 - (A) A high vapor cutoff thermostat with manual reset; and
 - (B) For degreasers with spray devices, a vapor-up thermostat which will allow spray operation only after the vapor zone has risen to the design level; and
 - (C) Either a freeboard ratio greater than or equal to 1.00 or a refrigerated freeboard chiller; and
- (v) Conveyorized vapor degreasers shall have:
 - (A) A drying tunnel or a rotating basket sufficient to prevent cleaned parts from carrying liquid solvent out of the degreaser; and
 - (B) A high vapor cutoff thermostat with manual reset; and
 - (C) A vapor-up thermostat which will allow conveyor movement only after the vapor zone has risen to the design vapor level.
- (b) The operation of any solvent metal cleaner shall meet the following requirements:
 - (i) Solvent shall not leak from any portion of the degreasing equipment;
 - (ii) Solvent, including waste solvent, shall be stored in closed containers and shall be disposed of in such a manner as to prevent its evaporation into the atmosphere;
 - (iii) For cold cleaners, cleaned parts shall be drained until dripping ceases; and
 - (iv) Degreasers shall be constructed to allow liquid solvent from cleaned parts to drain into a trough or equivalent device and return to the solvent tank.
- (c) For open-top vapor degreasers, solvent drag-out shall be minimized by the following measures:
 - (i) Racked parts shall be allowed to drain fully;
 - (ii) The work load shall be degreased in the vapor zone until condensation ceases;
 - (iii) Spraying operations shall be done within the vapor layer;
 - (iv) When using a powered hoist, the vertical speed of parts in and out of the vapor zone shall be less than three meters per minute (ten feet per minute);
 - (v) When the cover is open, the lip of the degreaser shall not be exposed to steady drafts greater than 15.3 meters per minute (fifty feet per minute); and
 - (vi) When equipped with a lip exhaust, the fan shall be turned off when the cover is closed.
- (d) For conveyorized vapor degreasers, solvent drag-out shall be minimized by the following measures:
 - (i) Racked parts shall be allowed to drain fully; and
 - (ii) Vertical conveyor speed shall be maintained at less than three meters per minute (ten feet per minute).

WAC 173-465-330 Ambient impact requirement.

- (1) The applicant for a notice of construction under WAC 173-465-120 shall demonstrate that emissions from the source are sufficiently low to protect human health and safety from potential carcinogenic and other toxic effects. Compliance shall be demonstrated in all areas which do not have restricted or controlled public access. The applicant shall demonstrate compliance after complying with the control technology requirements in this chapter.
- (2) **New or modified source**s of **TAP**s demonstrate compliance:

- (a) by using the **ASIL** screening procedures in WAC 173-465-340,
- (b) by using the site-specific analysis procedures in WAC 173-465-350, or
- (c) by using the risk management procedures in WAC 173-465-360

WAC 173-465-340 Demonstrating ambient impact compliance.

(1) **Ecology** or the **authority** may complete this analysis.

(2) Acceptable source impact analysis.

- (a) **Carcinogenic and toxic effects.** The owner or operator shall use dispersion modeling to estimate the maximum1-hour concentration of each **TAP** from the source and compare the result to the **ASIL**s in WAC 173-465-380. If applicable, the source may use the small quantity emission rates in (d) of this subsection.
- (b) **Dispersion modeling.** The owner or operator shall use dispersion modeling techniques in accordance with the **EPA** *Guideline on Air Quality Models, EPA* (*Revised*), 40 CFR Part 51, Appendix W, which is hereby incorporated by reference. If concentrations predicted by dispersion screening models exceed applicable **ASILs**, more refined modeling and/or emission estimation techniques shall be used. Refined modeling techniques shall be approved by **ecology** and the **authority**. (Note: **EPA**'s Guideline on Air Quality Models, EPA-450/2-78-027R, can be obtained through NTIS (703) 487-4650 or can be downloaded from the OAQPS Technology Transfer Network electronic bulletin board system).
- (c) **Averaging times.** The owner or operator shall use the averaging times in WAC 173-465-380 unless alternate averaging times are approved by **ecology**. **Ecology** may allow the use of an alternate averaging time if it determines that the operating procedures of the source may cause a high concentration of a **TAP** for a short period and that consideration of potential health effects due to peak exposures may be warranted for the **TAP**.
- (d) **Small quantity emission rates.** Instead of using dispersion modeling to show compliance with ambient impact demonstration requirements in WAC 173-465-330, a source may use the small quantity emission rates specified in WAC 173-465-380. A source must first meet control technology requirements of this chapter and emission quantification requirements of WAC 173-465-310, before demonstrating that the source emission rate does not exceed the SQERs.
- (3) **Criteria for compliance.** Compliance with the ambient impact requirement of WAC 173-465-330 is demonstrated if **ecology** or the **authority** determines that, on the basis of the acceptable source impact analysis of this section, the source's maximum 1-hour concentrations from the dispersion modeling do not exceed the **ASIL**s in WAC 173-465-380; or, if applicable, the source **TAP** emission rates do not exceed the small quantity emission rates specified in WAC 173-465-380.

WAC 173-465-350 Request for Site-Specific Analysis.

(1) Applicability.

(a) The owner or operator who cannot demonstrate compliance with WAC 173-465-330 using an **ASIL** analysis as provided in WAC 173-465-340, may submit a petition requesting **ecology** perform a site-specific analysis evaluation to determine a means of compliance with WAC 173-465-330 by

establishing allowable emissions for the source. Petitions for site-specific analysis evaluation shall be submitted to the local **authority** or **ecology** if **ecology** has jurisdiction over the source. Petitions received by local authorities shall be submitted to **ecology** within ten days of receipt. A site-specific analysis evaluation may be requested when a source wishes to more accurately characterize risks, to justify risks greater than **ASILs**, or to otherwise modify assumptions to more accurately represent risks. Risks may be more accurately characterized by utilizing updated **EPA** IURs (unit risk factors), IRfCs (inhalation reference concentrations), or other **EPA** recognized or approved methods. The IURs and IRfCs are freely available at **EPA**'s IRIS (Integrated Risk Information System) internet site (http://www.epa.gov/iris/). **Ecology** shall specify the maximum allowable emissions of any **TAP** source based on **ecology**'s site-specific analysis evaluation.

- (b) **Ecology** shall evaluate a source's site-specific analysis only if:
 - (i) The **authority** has advised **ecology** that other conditions for processing the notice of construction have been met; and
 - (ii) Emission controls contained in the preliminary determination represent at least BACT; and
 - (iii) Ambient concentrations exceed **ASIL**s after using more refined emission quantification and air dispersion modeling techniques; and,
 - (iv) Pollution prevention options have been thouroghly considered, and either adopted, or determined infeasible.
- (c) **Ecology** shall determine whether the conditions in (b) of this subsection for a site-specific analysis have been satisfied within ten working days of receipt of all information needed to make the determination. The matter shall be returned to the **authority** if **ecology** finds the conditions for a site-specific analysis evaluation have not been met.

(2) **Jurisdiction.**

- (a) Any site-specific analysis application submitted by a source wishing to emit toxic air pollutants at levels greater than the **ASIL** contained in WAC 173-465-380 shall be approved or rejected by **ecology**.
- (b) Any new emission limits approved by **ecology** as a result of the site-specific analysis evaluation shall be enforced by the **authority** provided the **authority** approves the new emission limits.

(3) Approval criteria.

- (a) Based on the site-specific analysis, ecology may approve the emissions of TAPs from a source where ambient concentrations exceed ASILs only if it determines that emission controls represent at least BACT and the source demonstrates that emissions of carcinogenic TAPs are not likely to result in an increased cancer risk of more than one in one hundred thousand. The emission of carcinogenic TAPs at levels likely to result in an increased cancer risk of more than one in one hundred thousand requires the approval of the director after complying with WAC 173-465-360.
- (b) **Ecology** shall consider the site-specific analysis and other information submitted by the applicant as well as department of health comments.
 - (i) Comments from other agencies and universities with appropriate expertise may also be considered in the decision to approve emissions that exceed **ASILs**.

(4) Contents of the site-specific analysis.

(a) The site-specific analysis consists of a health impact assessment. The applicant shall complete and submit a health impact assessment to **ecology** which includes the following information. **Ecology**

may approve the submittal of less information if it determines that such information is sufficient to perform the site-specific analysis evaluation. The health impact assessment shall be prepared in accordance with **EPA**'s Guidelines for Carcinogenic Risk Assessment, 51 FR 33992 (September 24, 1986), which is hereby incorporated by reference.

- (i) Demographics such as population size, growth, and sensitive subgroups;
- (ii) Toxicological profiles of all toxic air pollutants that exceed the **ASIL**;
- (iii) Characterization of existing pathways and total daily intake for toxic air pollutants that exceed the **ASIL**:
- (iv) Contribution of the proposed source toward total daily intake for toxic air pollutants that exceed the **ASIL**;
- (v) Using existing data, characterization of risk from current exposure to the toxic air pollutants that exceed the **ASIL**. This includes existing **TAP** sources in the area, and anticipated risk from the **new source** or **modification**;
- (vi) Additive cancer risk for all carcinogenic **TAP**s which may be emitted by the source;
- (vii) Other information requested by **ecology** and pertinent to **ecology**'s decision to approve the site-specific application;
- (viii) Uncertainty in the data; and
- (ix) Length of exposure and persistence in the environment.
- (b) The health assessment shall utilize current scientific information. New scientific information on the toxicological characteristics of **TAP**s may be used to justify adjustments to **EPA** unit risk factors used to calculate **ASIL**s in WAC 173-465-380 and/or absorption rates of individual toxic air pollutants if **ecology** determines there is compelling scientific data which demonstrates that the use of **EPA** recognized or approved methods are inappropriate.

(5) Additional information.

- (a) If approved by **ecology**, newly discovered scientific information which was unavailable at the time of the original submission of the health assessment may be used to justify alterations to the original health assessment. **Ecology** may approve the additional information if the source exercised due diligence at the time of original submission.
- (b) Within thirty days after receipt of the site-specific analysis and all supporting data and documentation, **ecology** may require the submission of additional information needed to evaluate the site-specific analysis.

(6) **Determination**.

- (a) If the site-specific analysis is approved by **ecology**, **ecology** will return the petition to the **authority** and the **authority** may approve the notice of construction.
- (b) The **authority** shall specify allowable emissions consistent with **ecology**'s site-specific analysis evaluation determination expressed in weight of pollutant per unit time for each emissions unit involved in the application. The notice of construction shall also include all requirements necessary to assure that conditions of this chapter and chapter 173-400 WAC are satisfied.
- (7) **Public notification requirements. Ecology** decisions regarding site-specific analysis shall comply with public notification requirements contained in WAC 173-400-171.

WAC 173-465-360 Request For Risk Management Decision.

(1) **Applicability.** The owner or operator of a source that emits carcinogenic **TAP**s that are likely to result in an **increased cancer risk of more than one in one hundred thousand** may request that **ecology** establish allowable emissions for the source.

(2) Contents of the application.

- (a) The applicant shall meet the submittal requirements of WAC 173-465-350(1) and submit all materials required under WAC 173-465-350(4) and (5).
- (b) Prior denial of the site-specific analysis application under WAC 173-465-350(6) is not required. The applicant may submit the request for a risk management decision concurrently with the site-specific analysis application.
- (3) **Criteria for approval. Ecology** may approve the emissions of **TAP**s from a source where ambient concentrations are likely to result in an **increased cancer risk of more than one in one hundred thousand** only if the source first demonstrates the following:
 - (a) Proposed emission controls represent all known available and reasonable technology; and
 - (b) Application of all known available toxic air pollution prevention methods to reduce, avoid, or eliminate toxic air pollutants prior to their generation including recycling, chemical substitution, and efforts to redesign processes; and
 - (c) The proposed changes will result in a greater benefit to the environment as a whole.
- (4) **Additional methods to reduce toxic air pollutants.** In addition to the requirements in subsection (3) of this section, the owner or operator may propose and **ecology** may consider measures that would reduce community exposure, especially exposure of that portion of the community subject to the greatest additional risk, to comparable toxic air pollutants provided that such measures are not already required.
- (5) **Public involvement. Ecology** will initiate public notice and comment within thirty days of receipt of a completed risk management decision application. In addition to the public notice and comment requirements of WAC 173-400-171, the owner or operator shall hold a public hearing to:
 - (a) Present the results of the site-specific analysis of WAC 173-465-350, the proposed emission controls, pollution prevention methods, additional proposed measures, and remaining risks; and
 - (b) Participate in discussions and answer questions.

WAC 173-465-370 Acceptable Source Impact Levels

(1) Criteria for listing as TAP.

- (a) **Ecology** shall list a substance or group of substances as **TAP**s if it has reason to believe that the substance or group of substances are likely to be emitted from an emissions unit and the emission of such substance or group of substances could impact public health. The substance or group of substances shall be removed from the list if **ecology** determines that these conditions no longer exist.
- (b) **Ecology** may list mixtures of substances as **TAP**s if it determines that the health impact of the mixture is likely to be different from the known individual chemical impacts.

- (2) **Ecology** may adopt an **ASIL** only if **ecology** determines that concentrations at that level will not unreasonably endanger human health. **Ecology** derived each ASILs by one of several means.
 - (a) The preferred derivation is the **EPA** IURs (inhalation unit risks) and IRfCs (inhalation reference concentrations). **EPA** provides this information in its IRIS (Integrated Risk Information System).
 - (i) **IRIS carcinogenicity based ASILs**. Carcinogenicity-based ASILs are the annual average concentration that may cause an **increased cancer risk of one in one million**. They are expressed in units of micrograms per cubic meter. The **ASIL** is calculated by dividing 0.000001 by the IUR. *I.e.*, **ASIL** = 1/(1,000,000×IUR)
 - (ii) **IRIS threshold-based ASILs**. Toxicity-based ASILs are derived multiplying IRfCs by 1000, to convert units from μ g/m3 to mg/m3. *I.e.*, **ASIL** = IRfC×1000.
 - (iii) If both an IUR and and IRfC are available, then the lower resulting ASIL is used.
 - (iv) An annual averaging period applies to ASILs derived from IRIS IURs.
 - (v) A 24-hour averaging period applies to **ASIL**s derived from IRIS IRfCs.
 - (b) American Conference of Government Industrial Health TLV-TWA based ASILs: If there is neither an IUR nor an IRfC available in IRIS, then the ASIL is determined from the TLV-TWA. These apply to both carcinogenic and toxic substances.
 - (i) The ASIL is calculated by dividing the **TLV-TWA**, in mg/m3, by 300 to convert to 24 hour per day five-day per week exposure, and multiplying the result by 1000 to convert to μ g/m3. *I.e.*, **ASIL** = **TLV-TWA**×(10/3).
 - (ii) A 24-hour averaging period applies to **ASIL**s derived from **TLV-TWA**s.
 - (c) Ecology special ASILs
 - (i) If there is neither an IUR, IRfC, nor a **TLV-TWA** available, then **Ecology** may establish special **ASIL**s
 - (ii) **Ecology** may also establish special **ASIL**s if it determines that the above methods are inappropriate, do not adequately protect human health and the environment, or are overly stringent.

WAC 173-465-380 Toxic air pollutants; ASILs, de minimis, & SQERs

| ASIL | Averaging | SQER | de minimis | TAP Name [CAS #] {modifying criteria} |
|-------|-----------|--------|------------|--|
| ug/m3 | Time | lbs/yr | lbs/yr | |
| | | | | |
| | | | | |
| | | | | |